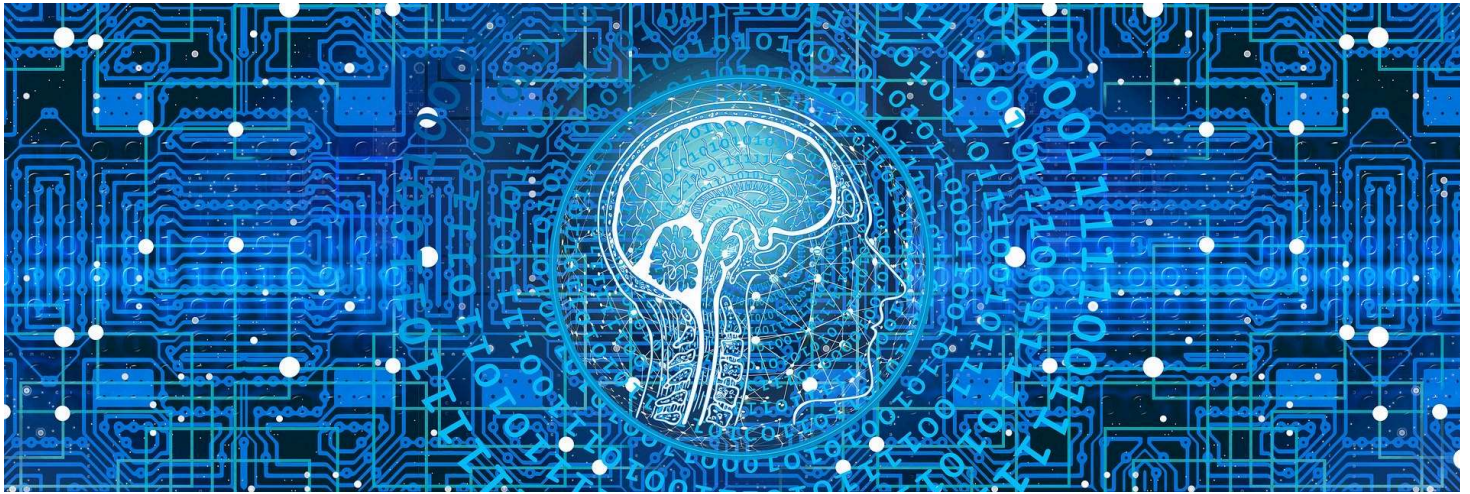


Edge Intelligence Workshop

March 2-3, 2020

[HOME](#) [CALL FOR PAPER](#) [SCIENTIFIC PROGRAM](#) [INVITED SPEAKERS](#) [COMMITTEES](#) [REGISTRATION](#)
[VENUE](#) [PROCEEDINGS](#)



SCIENTIFIC PROGRAM

The presentation files of the invited speakers and the pdf file of the presented posters are accessible from

<https://drive.google.com/drive/folders/1kaRXK0hTiKwBNN6JNi-7fcGisI0xhm7j?usp=sharing>

Monday 2 March 2020		
08:30-09:00	Yanhui Geng, Sébastien Le Digabel	Directors opening
09:00-09:30	Mehdi Rezagholizadeh	Edge intelligence challenges in Huawei Noah's Ark Speech and Semantics Lab
09:30-10:00	Bianca Schroeder	Machine learning and data mining for better computer systems
10:00-10:30	Coffee Break	
10:30-11:00	Alejandro Murua	Neural performance under compression
11:00-11:30	Masoud Asgharian	On intrinsic dimension and causality
11:30-12:00	Ashish Khisti	Information theoretic approaches in distributed machine learning
12:00-13:00	Lunch box and Poster Session 1	
	Nonvikan Karl-Augustt Alahassa; Alejandro Murua Shallow Structured Potts Neural Network Regression (S-SPNNR) Serge Vicente; Alejandro Murua Statistical learning with the determinantal point process Damoon Robatian; Masoud Asgharian Semi⁺-supervised learning under sample selection bias Dipayan Mitra; Ashish Khisti Distributed Stochastic Gradient Decent with Quantized Compressive Sensing Alex Labach; Shahrokh Valaee Neural Network Sparsification Using Gibbs Measures Eyyüb Sari; Vahid Partovi Nia Batch Normalization in Quantized Networks	Mohammad Javad Shafiee; Andrew Hryniowski; Francis Li; Zhong Qiu Lin; Alexander Wong State of Compact Architecture Search For Deep Neural Networks Adel Abusitta; Omar Abdul Wahab; Talal Halabi Deep learning for proactive cooperative malware detection System Vasileios Lioutas; Ahmad Rashid; Krtin Kumar On Compressing The Embedding Matrix Of Language Models For Edge Deployment Ramchalam Ramakrishnan; Eyyüb Sari; Vahid Partovi Nia Differentiable Mask for Pruning Convolutional and Recurrent Networks Bharat Venkitesh; Md. Akmal Haidar; Mehdi Rezagholizadeh On-Device Neural Text Segmentation for Augmented Reality Translation
13:00-13:30	Shahrokh Valaee	A unifying framework for dropout in neural networks
13:30-14:00	Ali Ghodsi	Supervised Random Projections with Light
14:30-15:00	Hassan Ashtiani	Learning through the Lens of Compression
15:00-15:30	Coffee Break	
15:30-16:00	Yingxue Zhang	Bayesian graph neural networks and its application in recommendation systems
16:00-16:30	Nandita Vijaykumar	Hardware-software co-design for efficiency and programmability for sparse matrix operations
16:30-17:00	Dominique Orban	Perspectives in computational optimization

17:00-17:30	Charles Audet	Challenges and perspectives in blackbox optimization
17:30-18:00	Sébastien Le Digabel	Blackbox optimization with the NOMAD solver
Tuesday 3 March 2020		
08:30-09:00	Brett Meyer	Probabilistic sequential multi-objective optimization of convolutional neural networks
09:00-09:30	Warren Gross	Stochastic computing for machine learning
09:30-10:00	Eyal de Lara	System support for smart applications on the edge
10:00-10:30	Coffee Break	
10:30-11:00	Pascal Poupart	Diachronic embedding for temporal knowledge graph completion
11:00-11:30	Tiago Falk	Signal processing for domain-enriched learning for speech applications
11:30-12:00	Yaoliang Yu	Multi-objective federated learning: Convergence and robustness
12:00-13:00	Lunch box and Poster Session 2	
	Ji Xin; Raphael Tang; Jaejun Lee; Yaoliang Yu; Jimmy Lin Progress and Challenges in Early Exit for BERT Guojun Zhang; Yaoliang Yu Convergence of Gradient Methods on Bilinear Zero-Sum Games Kaiwen Wu; Allen Houze Wang; Yaoliang Yu Efficient Wasserstein Adversarial Attacks Ibtihel Amara; James Clark Uncertainty Transfer with Knowledge Distillation Ghouthi Boukli Hacene; Vincent Gripon; Matthieu Arzel; Nicolas Farrugia; Yoshua Bengio Pruning for Efficient Hardware Implementations of Deep Neural Networks	Qing Tian; Tal Arbel; James Clark Deep LDA-Pruned Nets and their Robustness Zeou Hu; Yuxin Zhu; Ihab F Ilyas; Yaoliang Yu Fair Machine Learning through multi-objective optimization Xinlin Li; Vahid Partovi Nia Random Bias Initialization Improves Quantized Training Joao Felipe Santos; Tiago H Falk Pruning recurrent speech enhancement models via stuck neuron elimination Mahdi Zolnouri; Xinlin Li; Vahid Partovi Nia Importance of Data Loading Pipeline in Training Deep Neural Networks
13:00-13:30	Andrea Lodi	Neural networks and mixed-integer programming
13:30-14:00	Daniel Aloise	A Lagrangean-based score for assessing the quality of pairwise constraints in semi-supervised clustering
14:30-15:00	Mohan Liu	On-device: bringing artificial intelligence closer to consumer
15:00-15:30	Coffee Break	
15:30-16:00	Yoshua Bengio	Towards low-energy deep learning
16:00-16:30	Vahid Partovi Nia	Edge intelligence challenges in Huawei Noah's Ark Computer Vision Lab
16:30-17:00	James Clark	Task-dependent structured pruning of neural networks
17:00-17:30	Fatiha Sadat	Natural language processing in low-resource settings
17:30-18:00	Adam Oberman	From an ODE for Nesterov's method to Accelerated SGD

18:00-18:30	Murat Erdogdu	Convergence rates for diffusions-based sampling and optimization methods
18:30-19:00	Organizers	Workshop wrap up



CANADA
EXCELLENCE
RESEARCH
CHAIR



**DATA SCIENCE
FOR REAL-TIME
DECISION-MAKING**



**CENTRE
DE RECHERCHES
MATHÉMATIQUES**